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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,407	03/30/2001	Srinivas Kandala	8371-118	9018
20575	7590	11/09/2004	EXAMINER	
MARGER JOHNSON & MCCOLLOM PC 1030 SW MORRISON STREET PORTLAND, OR 97205			NGUYEN, BRIAN D	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 11/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/823,407

Applicant(s)

KANDALA, SRINIVAS

Examiner

Brian D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the application filed 3/30/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/27/03 & 3/30/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-24 are objected to because of the following informalities:

Claim 1, line 12, “the devices” seems to refer back to “the respective devices” in line 11.

If this is true, it is suggested to change “the devices” to ---the respective devices---. In step (g), it is suggested to change “a DCF mode” to ---a Distribution Coordination Function (DCF) mode---.

Claim 2, for the same reason as claim 1, it is suggested to change “the devices” in line 2 to ---the respective devices---.

Claim 3, it is suggested to change “a SIFS” to ---a Short Inter-Frame Spacing (SIFS)---.

Claim 4, it is suggested to change “a CTS” to ---a Clear To Send (CTS)---.

Claim 5, line 7, it is suggested to change “a DCF mode” to ---a Distribution Coordination Function (DCF) mode---. In line 9, “a MAC sublayer” seems to mean a MAC sublayer of the communication device mentioned in line 1. If this is true, it is suggested to change “a MAC sublayer” to ---a MAC sublayer of the device---.

Claim 6 is object as being dependent on rejected claim 5.

Claim, 7, it is suggested to change “a SIFS” to ---a Short Inter-Frame Spacing (SIFS)---.

Claim 8, it is suggested to change “a CTS” to ---a Clear To Send (CTS)---.

Claims 9-12 and 17-20 have the same problem as claims 1-4.

Claims 13-16 and 21-24 have the same problem as claims 5-8.

Claim Rejections - 35 USC § 103

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2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heide (5,677,909) in view of Haartsen (6,574,266).

Regarding claim 1, Heide discloses a communication device (12) comprising: a physical medium (18, 19); and a processor (16 of figure 1 and col. 5, lines 1-5) coupled with the physical medium, wherein the processor is adapted to receive a plurality of reservation request (access request) frames from a plurality of respective devices during a Centralized Contention Interval for a wireless communication channel (see col. 5, lines 51-60); determine at a MAC sublayer a schedule of transmission sessions for exchanging data with the respective devices as per the respective reservation requests (see col. 10, lines 25-43); identify one of the devices from the schedule as being the next one; acquire control of the channel; transmit the polling frame over the channel while in a DCF mode (see col. 10, lines 23-24); and exchange data over the channel from the identified device during the respective session (see col. 8, lines 45-47). Heide does not specifically disclose decoding receiving information such as a reservation request and a return address and encoding transmitting information such as the associated return address. However, encoding and decoding are well known in the art. Haartsen discloses the use of encoding and decoding in a communication network (see col. 4, lines 38-39 and 61-62). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to

encode/decode data as taught by Haartsen in the system of Heide in order to protect the data during transmission.

Regarding claim 2, Heide discloses the processor is further adapted to: identify another one of the devices from the schedule as being the next one; and repeat (e) through (h) (see figure 6 and col. 10, lines 25-43 where the remote stations are sequentially assigned time slots).

Regarding claim 3, Heide discloses receiving the data is to be within a SIFS of transmitting the polling frame (see col. 8, lines 45-47 where the remote station transmit data upon receiving of CTS frame. Note that a Short Inter-Frame Space (SIFS) is defined by IEEE 802.11).

Regarding claim 4, Heide discloses the polling frame is a CTS frame (see col. 8, lines 36-39).

Regarding claims 5 and 6, Heide discloses a communication device (14) comprising a physical medium (19); and a processor (not shown) coupled with the physical medium, wherein the processor is adapted to transmit a reservation request through a wireless communication channel during a Centralized Contention Interval (see col. 3, lines 51-60); receive a polling frame through the channel while in a DCF mode (see col. 5, lines 63-65); determine whether the return address matches an address of a MAC sublayer; and if so, transmit data from the MAC sublayer through the channel (see col. 8, lines 35-50); and discontinue transmitting data after the session window ends (see col. 10, lines 25-43 where time slots are assigned to each remote stations and a respective remote station will only be allowed to transmit data during the respective assigned time slots). Heide does not specifically disclose decoding a return address from the polling frame. However, decoding received information is well known in the art. Haartsen discloses the

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use of decoding in a communication network (see col. 4, lines 38-39 and 61-62). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decode data as taught by Haartsen in the system of Heide in order to extract information from the encoded data.

Regarding claim 7, Heide discloses transmitting the data from the MAC sublayer is to be performed within a SIFS from receiving the polling frame (see col. 8, lines 45-47 where the remote station transmit data upon receiving of CTS frame. Note that a Short Inter-Frame Space (SIFS) is defined by IEEE 802.11).

Regarding claim 8, Heide discloses the polling frame is a CTS frame (see col. 8, lines 36-39).

Regarding claims 9-12, claims 9-12 are article claims that have substantially all the limitations of the respective apparatus claims 1-4. Therefore, they are subject to the same rejection.

Regarding claims 13-16, claims 13-16 are article claims that have substantially all the limitations of the respective apparatus claims 5-8. Therefore, they are subject to the same rejection.

Regarding claims 17-20, claims 17-20 are method claims that have substantially all the limitations of the respective apparatus claims 1-4. Therefore, they are subject to the same rejection.

Regarding claims 21-24, claims 21-24 are method claims that have substantially all the limitations of the respective apparatus claims 5-8. Therefore, they are subject to the same rejection.

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lin et al (6,804,222), kamerman et al (6,067,291), Welch et al (5,903,373), Oschmann et al (5,724,168), and Gilbert et al (5,297,144).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


BRIAN NGUYEN
PRIMARY EXAMINER

10/30/04